

10/625,860
Amendment and Response
Facsimile no.: 571-273-8300
Date of Facsimile: June 8, 2007

Amendments to the Claims:

Please amend claims 1, 3-16, and 18, and add new claims 19 and 20 as follows. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) Apparatus for intermixing ~~small~~ objects and a liquid comprising at least one receptacle having sides and a bottom for receiving and retaining said ~~small~~ objects, wherein said ~~small~~ objects are at least one object selected from the group of affinity beads and one or more living organisms, at least a portion of wherein said receptacle being is permeable on the bottom and on a portion of at least one side to permit said liquid to flow through said portion receptacle to intermix with said affinity beads objects when said receptacle is inserted into a vessel containing said liquid, ~~wherein said liquid is a lysate containing proteins to be purified with the proviso that a portion of at least one side is not permeable~~.
2. (cancelled)
3. (currently amended) Apparatus for intermixing ~~small~~ objects and a liquid as set forth in claim 1 further including means for immersing said receptacle in said vessel a plurality of times.
4. (currently amended) Apparatus for intermixing ~~small~~ objects and a liquid as set forth in claim 1 wherein said receptacle is constructed of a material that is chemically inert with respect to said liquid and said ~~small~~ objects.
5. (currently amended) Apparatus for intermixing ~~small~~ objects and a liquid as set forth in claim 1 wherein said portion of said receptacle that is permeable is located at or near the bottom of said receptacle.
6. (currently amended) Apparatus for intermixing ~~small~~ objects and a liquid as set forth in claim 1 wherein said portion of said receptacle that is permeable is formed from a mesh having openings that are smaller than substantially all of said ~~small~~ objects to permit the flow of said liquid therethrough while retaining said ~~small~~ objects within said receptacle.

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7. (currently amended) Apparatus for intermixing small objects and a liquid as set forth in claim 1, wherein said portion of said receptacle that is permeable comprises a substantial portion of the bottom or lower the lower sidewalls of said receptacle.

8. (currently amended) Apparatus for intermixing small objects and a liquid as set forth in claim 1 wherein said small objects comprise one or more living organisms.

9. (currently amended) Apparatus for intermixing small objects and a liquid as set forth in claim 8 wherein said liquid contains a stain or a pharmaceutical, or said living organisms are subjected to biochemical conditions, whose effect on said living organism is being studied.

10. (currently amended) Apparatus for intermixing small objects and a liquid as set forth in claim 1 wherein the interior of said vessel containing said liquid is larger than but similar in size to the exterior of said receptacle so that, when said receptacle is inserted into said vessel, the level of said liquid in said vessel is displaced to a substantially higher level to increase the liquid pressure at the bottom of said receptacle to force said liquid upwardly into said permeable portion of said receptacle.

11. (currently amended) Apparatus for intermixing small objects and a liquid as set forth in claim 1 wherein said small objects carry proteins and wherein said liquid contains an antibody which attaches to said proteins to cause immunoprecipitation.

12. (currently amended) Apparatus for intermixing small objects with a liquid comprising a plurality of receptacles, each receptacle having sides and a bottom for containing said small objects, wherein said small objects are at least one object selected from the group of affinity beads and one or more living organisms, each of said receptacles is permeable on the bottom and on a portion of at least one side having a lower portion thereof that is permeable to permit the flow of said liquid therethrough, with the proviso that a portion of at least one side is not permeable, wherein said liquid is a lysate containing a protein to be purified, a vessel containing

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said solution, and means for repeatedly inserting said receptacles into said liquid in said vessel and then withdrawing said receptacle from said liquid to cause said liquid to first flow into said receptacle through said ~~lower~~ permeable portion when said receptacle is inserted into said liquid and then to flow outwardly from said receptacle through said ~~lower~~ permeable portion when said receptacle is withdrawn from said liquid.

13. (currently amended) Apparatus for intermixing ~~small~~ objects with a liquid as set forth in claim 12 wherein said liquid is a lysate containing proteins and said ~~small~~ objects are affinity beads to which said proteins become bound when said liquid and said affinity beads are intermixed.

14. (currently amended) Apparatus for intermixing ~~small~~ objects with a liquid as set forth in claim 13 wherein said portion of each of said receptacles that is permeable defines openings which are large enough to permit the flow of said lysate therethrough but smaller than substantially all of said affinity beads.

15. (currently amended) Apparatus for intermixing ~~small~~ objects with a liquid as set forth in claim 12 wherein said portion of each of said receptacles that is permeable defines openings which are large enough to permit the flow of said liquid therethrough but smaller than substantially all of said solid objects.

16. (currently amended) Apparatus for intermixing ~~small~~ objects with a liquid as set forth in claim 15 wherein said portion of said receptacle that is permeable is a mesh located at the bottom of said receptacle.

17. (canceled)

18. (currently amended) Apparatus for intermixing ~~small~~ objects with a liquid as set forth in claim 12 wherein said ~~small~~ objects are living organisms and said liquid contains a stain or pharmaceutical whose effect on said living organisms is being studied.

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19. (new) Apparatus for intermixing objects and a liquid according to claim 1, wherein the objects are affinity beads and the liquid is a lysate containing proteins to be purified.

20. (new) Apparatus for intermixing objects and a liquid according to claim 1, wherein the living organisms are at least one organism selected from the group of embryos, larvae, and the like.